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CONTRIBUTED ARTICLES

Brood-Frame for Comb and Extracted Honey.

BY C. A. BUNCH.

HAVING used the Simplicity-Langstroth frame for 13 seasons, I think it is all right for the production of comb honey, and I like the frame first-rate; but for the production of extracted honey I would like the frame about two inches deeper. I find the frame is too shallow, as Mr. C. P. Dadant well says.

My hive for extracting has 12 Langstroth frames in the brood-chamber, and the supers are the same length and width, and hold 10 frames 6 inches deep, which make an ideal super, only that the queen is very apt to go up from the shallow Langstroth frames below and lay eggs in the extracting-combs, which causes the bees to store all, or nearly all, the honey there about the eggs and brood, which does not suit me, as I want my bees to feed themselves for winter, and place the honey in the brood-nest, enough at least to winter on.

I consider this a serious fault, but very little is said about it, and I think I will never change to a deeper frame for the brood-chamber, as it would cost too much, but what I have said may be the cause of the beginner in apiculture investigating the matter, which might be to his advantage.

FULL SHEETS OR STARTERS IN SECTIONS—WHICH?

Full sheets of foundation in sections, or starters $\frac{3}{4}$ inch deep—which shall we use? For myself I want to say it is a well known fact that full sheets of foundation in sections do not of themselves secure a crop of honey. Bear this in mind.

After experimenting along this line for years, I have time and again filled sections one-half to three-fourths full of foundation and placed them carefully on the hives only to take them off a couple of months later to scrape them and put foundation in them again. And why? Just because we had a poor season, and the bees borrowed said foundation and carried it down below. But a good season would cause drone-comb to be built in the sections, that Editor Root says would be more "gobby" eating, which I think is more imagination than real harm. Am I not about right?

REPORT FOR THE SEASON OF 1898.

I commenced the season with 87 colonies of bees in fair condition, increased to 92, and took off 1,200 pounds of honey, about two-thirds extracted and one-third comb, which is far below the average of my apiary—27 pounds.

Marshall Co., Ind.

Height to Which Sweet Clover Grows.

BY W. W. LATHROP.

THIS picture was taken to show how high sweet clover grows in my back yard. I am 5 feet 9 $\frac{1}{4}$ inches tall, and I hold a two-foot rule in my hand, which shows that the clover at that end of the row is 9 feet high.



The plants in the foreground are cleome pungens and gladiolus; at the right, blackberries and tomato vines; in the background, a plum and an apple tree; and in the shade of these are my five hives with bees, one of which can be seen.

Fairfield Co., Conn.

Hauling Bees to and from Out-Apiaries.

BY C. DAVENPORT.

FOR the benefit of those who haul bees to and from out-yards, I will describe the screens I use and the manner of fastening them to the hives. No nails are used, yet they are more firmly and quickly fastened over the top of a

hive than can be done by the use of nails. While there are hive-hooks made and designed to be used for such purposes, they have not proved (with me) very satisfactory, and when nails are used the hives in time become damaged, for in order to be sure the nails will hold it is necessary to drive them in a new place each time, and I much dislike to mar or damage hives in any way, for they are an important part of the means by which I earn a living, and also enable me to lay up a little each year for old age, or a rainy day, as the saying is.

Altho my method of fastening screens to hives without the use of nails or marring the hive in any way is so simple and easily employed that probably many others have made use of it, I do not remember ever seeing anything said about it. There are, without doubt, many who have not thought about it, and some time ago one of the great honey-producers of California, who hauls as many as 150 colonies at one load, described the kind of screen he used; and altho he had tried hooks he preferred nails instead, but seemed far from being satisfied with nails as a means of attaching screens over the top of hives.

The screen I use is large enough to cover the entire top of the hive, and I will say here that I consider it a very important matter when hauling bees to give them plenty of air, as the jarring and disturbance cause them to fill themselves with honey, and arouse them to such activity that they generate much more heat than when in a normal condition. While in some cases colonies can be moved without much provision being made for the ventilation of the hives, and not actually smother, I do not think they do so well for some time afterwards.

The frames for the screens should be made so that the wirecloth will be up at least an inch above the top of the brood-frames. Some of mine are made of inch thick pieces about two inches wide, and halved together at the corners. The wire screen is tacked over the entire top, and then pieces of lath are nailed on top of it around the edges, so the edges of the wire will not be turning up and catching things, or cutting one's hands.

Tho I have the frames of these screens made in various ways, they are all of such size that when placed on top of a hive the outer edge of the frame is just even or flush with the outside of the hive on both sides and at each end. In other words, the frame is just the size of the top of the hive.

After a frame is made so far, I take eight pieces of lath for each frame, that are about three inches long, and nail two pieces on each side, and two on each end of the frame. They are nailed on near the corners on the outside of the strips forming the frame. The top or upper end of each of these short pieces of lath are just up even with the wirecloth, so the lower part of them hangs or projects down on the outside of the hive.

Now, if I have made myself understood, it will be seen that the screen, on account of these short pieces, cannot be shoved or moved out of place, either sidewise or endwise. The only way it can get out of place, or be removed, is by being raised up. To prevent its raising up, two stout strings (or perhaps very small rope more nearly expresses what I use, something like a small cotton clothes-line), are tied around the hive, bottom-board, screen and all. They are placed one near each end. If, however, the frame fits down true on the top of the hive, and there is no danger of the load being upset, one string near the center is ample. If the frame does not fit true it can easily be brought down tight, when a string is used at each end. A screen can be tied on in less time than nailed, and if tied tight enough it will hold the screen surer than nails will.

I will briefly cite an incident in support of it: One spring I sold four colonies, and was to deliver them to the buyer, a few miles away. There was one place on the road where there was a high embankment off to one side, and when I arrived at about the worst place, the horse I was driving—a powerful black one that I had recently traded for—suddenly whirled almost square around, and upset the wagon so that I with the hives went down the embankment. Screens were tied on as I have described, and none were loosened or out of place except on one hive, which struck on a rock and was badly broken up.

There is quite a knack about tying strings around a hive, but it is easily acquired. I have a loop on one end of each string, and pass the end without the loop under the hive, then up thru the loop; the string is then placed so that the edge of the loop is even with the outside of the frame. I then draw it tight and hold it from slipping or loosening with the left hand, while tying the knot with the right hand. These strings cost but a trifle in the first place, and will last so long that they are about as cheap as nails.

I use loose bottom-boards, and have special ones for hauling, which are made just the same as an ordinary bottom-board except they have short pieces of lath nailed on at the sides and on the back end, which project up and prevent the hive-body from moving sidewise or backwards. To prevent its moving forwards, and to close the entrance, blocks are used that I will describe, for depending upon a simple strip to close the entrance, with bottom-boards that have strips around the outside to form the entrance, like the dovetailed bottom-board, with me has sometimes caused trouble. I take a strip that will just fit between the strips on the bottom-board so it will entirely close the entrance, and which is about $1\frac{1}{4}$ inches wide. Then I take another strip which is long enough to reach clear across the bottom-board, but which is only $\frac{3}{4}$ inch wide. Now to make myself clear I will say, take the shorter strip and shove it in at the entrance until only about half its width is left out in front, then take the longer and narrower piece and lay it over or on top of the short piece that projects out in front, and tack the two together with small nails that can be clincht. To hold it in place when moving, two wire nails are driven in the bottom-board in front of it. With this kind of block, if the body of the hive moves nearly an inch on the bottom-board either backward or forward, no bees can escape.

A bee-keeper who saw my screens made some in a little different way. The frames of his were just the size of the top of the hive, but the strips forming them were only $\frac{7}{8}$ inch wide, and instead of using short pieces of lath nailed on the outside to hold them in place, he used short pieces of thick iron that had two holes in one end, and one piece was fastened at each corner of the frame on the inside of the $\frac{7}{8}$ -inch strip, so that these irons fitted down inside the hive. While he considered this way an improvement, I prefer to have short pieces of lath on the outside, as they prevent the hives themselves from coming close enough together to rub or chafe the paint off.

Southern Minnesota.



An Experience with Bees in Wisconsin.

BY HERBERT CLUTE.

IN the spring of 1895 I moved here from Mauston, Wis., where the large honey crop the year before showed Clark County to be as good for honey in quantity as well as quality as any place in this State, of which the latter is the very best as to color and flavor. That spring (1895) I traded my bees at Mauston toward a one-third share in one car-load of bees that Mr. Grimm, of Jefferson, Wis., had, and which were purchased by Frank McNay, and placed in my care here.

We had a very bad freeze here on or about May 25, that killed all basswood blossoms, so as to make things look very discouraging, as the bees hardly had a pound of honey thru July to breed on, except what little the raspberries furnished.

On Aug. 1 they began to swarm, and the hive on scales commenced to gain, the first day's gain being $3\frac{1}{2}$ pounds. All thru August there was a lot of rainy weather each week that would check the honey-flow so that sometimes it would be a couple of days before the bees would gain as before. The honey harvest lasted until Sept. 5; on that day the colony on scales gained $5\frac{1}{2}$ pounds, there being that day a hot wind so as to take all life out of the flowers, it checked the honey harvest so as to stop all the nectar from flowing as before, and from then on the bees never gained an ounce of honey, still there was fine weather and lots of flowers. From the car of bees, or 100 colonies, there was an average of 100 pounds besides an increase of 28 colonies, and 400 new combs drawn out for extracting.

The next spring, 1896, the apiary was all moved $1\frac{1}{4}$ miles west, to the other side of town, just inside of the city limits, as the year before the bees all worked in that direction, on the river bottoms, which made $1\frac{1}{4}$ miles that was useless for them to travel.

That spring (1896) there was another car of bees purchased in chaff hives from Hartford, and turned in as before with 50 other colonies that I had purchased at Neilsville. All the bees were divided in two apiaries, one apiary for home yard and the other for an out-yard, which was located five miles southwest from the home yard. That season they gave a surplus of 30,000 pounds of honey, gathered from July 1 to the 30th, from basswood and willow-herb. That fall the out-apiary was brought in and placed with the home yard, and kept together from that time on, for the reason that both apiaries took more time to do the same amount of work than if both were together; and for another reason, the bees in each yard worked the heaviest

toward each other, as the big slashing lay between the two yards showed that if they all had been together there would be just as much honey gathered, besides less work to tend them all.

The season of 1897 was a very poor one in Clark County, as well as over the most of the State. In the springtime here it was very cool and rainy; strong colonies of bees dwindled down to nothing, which found lots of empty hives at the commencement of the honey-flow, which began about July 4, and lasted until July 25. The apiary gave but 25 barrels of basswood honey.

The season of 1898 was another poor one, which made two poor seasons in succession for the bees, as there was only an eight days' honey-flow that came in July from basswood. It gave an average of only 75 pounds to the colony, of extracted honey (as there is no comb honey produced in the apiary), besides plenty of honey for wintering.

The bees in chaff hives seem to do the best in the apiary, except in early spring they don't seem to get the benefit of the sun as do the bees in single-walled hives, so as to breed up as early. The rest of the season they are far ahead of single-walled hives, especially for honey.

Each chaff hive has 10 frames below (Langstroth size), and 14 to 16 above, the same size as below; while the single-wall hive has only 8 frames of the Grimm-Langstroth size.

The best day's gain in the season of 1898, in an 8-frame Langstroth hive, was 12½ pounds, while on the same day the best gain in a chaff hive was 21¼ pounds. The hot days and cool nights didn't seem to affect the bees in the chaff hives as much as in the single-wall, as the wall prevents the heat from entering, which seems to save the bees lots of labor in ventilating the hive; still, the entrance of chaff hives is not as large as the others for air.

Last winter was my first in trying to winter bees in the cellar. Eighty colonies in chaff hives were placed in the cellar, and 20 left out on the summer stands. Out of the 80 in the cellar there were 80 strong colonies taken out in the spring, while of the 20 out-of-doors 10 died, or 50 percent.

There would be an improvement on the chaff hives for winter if the top part was in band or oven shape, so as to be taken off, and not to occupy so much room.

My honey extractor is a Van Allen & Williams 4-frame reversible. It is very handy on account of the comb-basket being so near the top. The extractor is kept fastened on a stationary bench made out of match ceiling, 8 feet to the left from the corner of the house, up just high enough for a pail to work handy under the faucet. From that on, running toward the corner of the building, there is another bench 8 inches higher running past a large window fitting snug to the extractor, with a square hole cut in it for uncapping the combs on, and to hand to the one that is turning the extractor.

For a capping-box there is a washtub set under the hole in the bench. From the corner running to the right there is another bench built 9 inches lower, in sink shape, running past another window for light to come in to give plenty of light on combs as they are being uncapped. This bench is for a washdish and pail of water, so as to keep the hands from being stuck up, by dipping the ends of the fingers in the water once in awhile. At the end of this sink-bench there is another bench built barrel high, 8 feet from the corner running to the right. This is for an extra-large barrel to rest on to strain the honey in; also to help ripen the honey, and the common 30-gallon barrels are stood up under a faucet and filled here.

By having the honey-extractor at the left 8 feet, and the strainer barrel at the right 8 feet, it gives a chance for the one that is extracting to carry the honey across the corner, and not be in the way of the one that is uncapping, but saves room, and keeps all the dauby muss from the drippings of honey from the extractor, uncapping-box and strainer-barrel, all in one corner of the house.

With the sink-hole being placed under the strainer-barrel bench, by throwing a pail of water up by the extractor, and with the use of a broom a couple of times or so through the day, the floor will keep clean, and the dauby muss won't have to be trod in. By keeping the floor cleaned, and the water being run in a drain, the bees never bother the bee-house by trying to get in.

Over each window is a row of bee-escapes that keeps the house rid of bees that are brought in on combs, and flies also.

The bee-house is two-story, 18x30 feet. The upper story is to store barrels, to work in, etc.; while all the honey is stored on the lower floor. The bee-cellar is made of white oak, 6x8 two feet apart, and plankt.

The bee-yard is graded into a sidehill, the upper side,

being a 4-foot cut, while the lower side is filled in 2 to 3 feet, which leaves the bees high and dry, and still near spring water. Trees are all around the grading, which keeps the wind from the bees. By the bee-yard being graded it gives a level entrance to the bee-cellar, which is built in the bank, to take the bees in and out.

Our honey-plants and honey-producing shrubbery here are, first in the spring maple-juice from the large maple trees (as quite a lot of maple syrup is made here), besides the sap from the stumps where the trees were cut for saw-logs, as there are carloads of the logs shipt from here every year. This sets the bees to breeding very early in the spring, as they sometimes gather 5 to 6 pounds to the hive.

Next comes tag and black elder that furnish lots of pollen, with willow of several kinds out about the same time, which furnish pollen and honey. Poplar and birch-elm of several kinds blossom, and the bees breed up fast; and as the wild cherry, plum and thorn-apple blossom the bees begin to swarm, the first swarms beginning to come off about the first of May. Each of the latter three trees are so thick as to make the woods look white when they are in blossom.

Dandelions are very thick here, and help the bees out in feed the most of any of the honey-plants until basswood bloom. White clover is thicker here than in almost any other part of the State, but the bees hardly ever notice it except in the latter part of its bloom, then once in awhile there is a day that they work on it well.

Raspberry blossoms come next to the dandelions, and the bees get a little honey from them so as to keep up breeding in good shape until the basswood sets in. At the same time the basswood blooms the willow-herb blossoms. The bees get the nicest honey from the willow-herb and asters; of the latter there are several kinds, but they don't yield honey every year.

Buckwheat is very seldom noticed by the bees here for some reason, the same as white clover.

The farmers are just beginning to raise Alsike clover here, and it grows very rank; the bees work on it very well. As the land gets cleared up more, so the ground will be warmer, and farmers get to raising more clover, the honey harvests will begin to get still larger each year. The first year that I was here there was not an acre of Alsike that I knew of. The past summer there was a little sown by most of the farmers.

Grocerymen claim their customers like our honey flavor better than any other. One of the grocerymen lets the honey candy in the barrel, then he sets the barrel of honey on a table in the front part of the store, and cuts all of the hoops from the barrel, then pulls the staves off. In that way it leaves one big lump of candied honey on the table right in the show-window; the customers come in and inquire what that big chunk of sugar is. He tells them that it is honey, and then they wish to buy a few pounds, and he takes a large knife that he has lying beside it, and slices off on the top edge as you would cheese. In this way he sold a barrel of honey a week, at a profit of 4 cents a pound, while the two adjoining groceries sold but a barrel or two all winter, of the same kind of honey, as it was shipt from me at the same time. But the others kept it in the barrel. They had the barrel up at the front of the store, but there was not enough curiosity excited in that way to create an appetite, as was the case with the large cake.

Clark Co., Wis.

York's Honey Almanac is a neat little 32-page pamphlet especially gotten up with a view to create a demand for honey among should-be consumers. Aside from the Almanac pages, the forepart of the pamphlet was written by Dr. C. C. Miller, and is devoted to general information concerning honey. The latter part consists of recipes for use in cooking and as a medicine. It will be found to be a very effective helper in working up a home market for honey. We furnish them, postpaid, at these prices: A sample for a stamp; 25 copies for 50 cents; 50 for 70 cents; 100 for \$1.25; 250 for \$2.75; 500 for \$4.50. For 25 cents extra we will print your name and address on the front page, when ordering 100 or more copies at these prices.

Langstroth on the Honey-Bee, revised by the Dadants, is a standard, reliable and thoroughly complete work on bee-culture. It contains 520 pages, and is bound elegantly. Every reader of the American Bee Journal should have a copy of this book, as it answers hundreds of questions that arise about bees. We mail it for \$1.25, or club it with the Bee Journal for a year—both for only \$2.00.



The "Old Reliable" seen through New and Unreliable Glasses.
By "COGITATOR."

GETTING THE PUBLIC TO EAT HONEY.

The Chicago convention was just level on the subject of getting the public to eat more honey. First reach their ears; and then be careful about putting any ill-tasting honey into their mouths. Don't you know, honesty, altho the *right* policy, is not always the *best* policy? Best policy sometimes has to go a long way beyond honesty. It's honest to sell poor honey, if you make the customer understand just what he is getting; but it's better policy for you not to do anything of the kind—kill your customers, and you haven't got any too many now.

HIVES WARM IN SPRING AND FALL AND COOL IN SUMMER.

But how to have black (the warmest color) on the hives spring and fall, and white, the coolest color in the summer, that problem seems rather to have floored the Chicago convention. Pres. Beers' suggestion of painting twice a year was none too practical. Tough job to paint a black hive white. A black hive completely shaded in hot weather seems to have been the nearest they got—none too near. Page 229. No one said double-walled hive, with the outer shell painted on both sides, and so joined at the corners as to be capable of being turned inside out. I have made a good many unpainted hives look respectable and white by tacking on cheap cotton cloth. I rather like the plan. In similar style a black hive could be surfaced with white cotton for summer, and "peeled" for autumn, if any one thought the matter important enough to pay for the trouble.

MAKING THE HONEY-LEAFLET EFFECTIVE.

The honey-leaflet (see editorials on page 232) is not self-enforcing, as indolent temperance folks would like a prohibitory law to be. Not much use to throw them around, in this day of advertisements knee-deep. But if you can afford to stir up a person's interest a little in the first place, and then give him a leaflet, some results will be likely to follow. In short, the leaflet, like any other tool, must have a workman to use it.

CURIOUS REASON FOR PROSPERITY OF BEES.

"Johnstown," on page 231, has a curious reason for the prosperity of bees in the Heddon hive—don't get meddled with so much by their bee-feverish master. Very possibly that would cut quite a figure in some cases.

BANKING HIVES WITH SNOW—"LONG-IDEA" HIVES.

Mrs. Axtell's experience (page 251) is quite an unusual one, and her prompt way of meeting it seems commendable. Bees taken out of the cellar April 1, or thereabouts, and before they had any flight a foot of snow came. Next, some enticing sunshine came along, and of course the poor bees, having been restrained all winter, wanted to fly. Now some say that bees which die on snow are merely bees that come out on purpose to die, and the only proper course is to let alone. Mrs. A. evidently belongs to the opposite (and I guess more numerous) party who regard as a calamity a grand flight when soft snow covers everything; ergo, she kept them in with well-bankt snow. She doesn't narrate the end of the struggle, whether it proved like holding a dog by its ears or not. The bee's strongest flight-maxim seems to be to keep its back toward the illuminated half of the cosmos. The snow-covered ground being brighter than the sky, it tries to fly with its back toward the ground—and makes a wreck of his voyage. Even if it gets up and starts again, inborn obstinacy makes it do the same thing right over again, until too cold to fly at all.

And so Mr. Poppleton still uses and champions the long-idea hive. First we know it will have another run; and if so we want to keep in mind some things told us on page 227. Neither Langstroth nor Gallup frames suitable (needs a deeper frame), and 16 frames not enough; hive should hold 24 at least, and a capacity of 28 would be better.

QUEENS LAYING AT WILL.

Paragraph 6 of "Beedom Boiled Down," page 250, hardly sounds candid, altho in a measure correct. The

queen *can* lay at will. She also can refrain from laying for a certain length of time. What she cannot do is to refrain *indefinitely* when fully distended with ripe eggs. Probably the length of time she can refrain differs greatly under varying circumstances—time much less when she is laying 1,000 eggs a day and 2,000 on Sunday, than when only depositing 200 a day. In order to have Mr. Dadant's remark amount to much of anything, we would have to infer that the queen, in the ordinary quiet of existence in an 8-frame hive wastes eggs for want of any place to lay them. Cogitator, for one, doesn't propose to believe that without considerable proof.

"FIGHTING UPON THE INTRODUCTION OF A QUEEN."

There is an inference in paragraph 9, page 250, that might as well be halted to await proof. Natural enough to infer that a queen cannot be harmed when not a hostile bee can touch her; but when the whole cage is balled solid with infuriated bees, ejecting poison, and the queen has to exist for hours in an atmosphere thick with poison, it looks as if she *might* be damaged to some extent thereby. Cogitator has a suspicion that half of that pint of dead bees were not killed by stings, but by too great and long-continued nerve excitement, aided by poison taken otherwise than by injection.

FEARS EXCESSIVE AS TO APIS DORSATA.

I rather feel that our editor and Dr. Miller are excessive in their fears of *Apis dorsata*, if allowed to run wild in the South. May be they are right, tho. Looks to 'Tater as if the decrease of regular honey crops by such a cause would be small, if not infinitesimal; while the enlargement of the poor man's resources, by gathering beeswax, and his larder by gathering wild honey, would be quite cheerful in these days of monopolies, and of destruction to the independent means of livelihood.

EX-EDITOR ABBOTT DESERVES HOMAGE.

Homage to the man who would rather be *ex*-editor, and a clean man, than fat-ox editor and his hands sooty with degrading and swindling advertisements. This means E. T. Abbott—see page 249. Also, I like the ring of Abbott's article on page 245. Not of *more* importance for us to bark at the big financial seizers and Cæsars than it is for us to get after flat, straight-out dishonesty in the sales between man and man.

"AGIN" THE FEEDING OF SUGAR SYRUP.

On page 245, W. W. McNeal also stands up for common honesty, dealing stalwart blows to the practice of stuffing the brood-chamber, just before harvest, with sealed sugar syrup. And he gets in a left-hander that some of us had not fully considered before, where he says that such a performance (in addition to its dishonesty) "will most certainly be done at the expense of brood or numerical strength."

A DANCING ELDER AND THE RHEUMATISM-DOCTORS.

And so the Elder, who doesn't believe in dancing, danced when the little hot-tailed rheumatism-doctors got in their work. Well, they cured the patient in 24 hours, which regular doctors do not always do; and they were rather unique among successful physicians in making no charge—that is, no charge except charge bayonets. See page 244.

SLIGHTLY CLIPPING QUEENS RATHER RISKY.

Clipping queens *slightly* before mating, to insure mating near home, must be risky indeed if the Michigan Agricultural College had only 4 mated out of 62 so clipt. Page 241.

IMPURE MATING AFFECTING THE QUEEN HERSELF.

It is of interest to see, on page 244, that Doolittle casts in his lot with those who hold that impure mating affects the *queen herself*, and thru her exerts a *slight but perceptible* influence on her drone offspring. Of course this is much less than the one-half influence exerted on the female offspring, but there is no use to deny its reality (if it is real) as it is perfectly comprehensible, and not unscientific. Cogitator (in a mild way, and on other people's observation rather than his own) joined the same crowd quite awhile ago.

Experiments to settle the matter positively should be made, Mr. D. well points out, on German bees, or some really pure race, not on such a high-mixt and sport-inclined race as the Italians.

HOW ABOUT DIFFERENCE IN MATING?

And the boys will surely ask how it is that at Mr. Doolittle's out-apiary one queen out of six showed extra-banded

blood from five miles away, while at Mr. Hutchinson's (page 241) none of the queens mated when the undesired blood was put back three miles. "Locality" again—but there's a locality called "The Noddle," that oft has an atom or so to do in some of these matters where doctors disagree.

COGITATOR.

CONVENTION PROCEEDINGS

Report of the Chicago Bee-Keepers' Convention.

BY HERMAN F. MOORE.

The third quarterly meeting of the Chicago Bee-Keepers' Association was held March 1, 1899. The printed program had been mailed to about 150 bee-keepers in and near Cook County, the resulting attendance being the 50 without the hundred. Total paid membership is now 50, making our association of half a year's life the largest city bee-keepers' association in America, if I am correctly informed.

The meeting was a great success, as any one might readily infer from an inspection of the printed program. Four seasonable topics were discussed. Dr. C. C. Miller was present, and helped in his characteristic way to make the meeting interesting and profitable to all who attended.

Pres. C. Beers opened the session with an address on the aims and objects of our association, pointing out clearly and concisely the pathway to success in our chosen pursuit.

A committee composed of George W. York, Mrs. Fannie Horstmann and H. M. Arnd, was appointed by the president to draw up resolutions expressing the sense of our association on the Pure Food Law then before the Illinois legislature, and also the Foul Brood Law, and a resolution endorsing the aims and objects of the United States Bee-Keepers' Association. This committee reported a set of resolutions in the afternoon, which were adopted without change, after some discussion, as follows:

RESOLUTION ON THE PURE FOOD LAW.

WHEREAS, It is well known to the public that honey in liquid form, as well as nearly every kind and character of food, is adulterated, and yet labeled "pure;" and

WHEREAS, Many of the adulterants so used are unhealthy and injurious to the human body; and

WHEREAS, Most, if not all, of the said articles so adulterated are fraudulently sold under false labels and false representations; therefore, be it

Resolved, That the Chicago Bee-Keepers' Association does recommend and urge the passage of the Pure Food Law about to be brought before the legislature of Illinois;

Resolved, That copies of these resolutions be forwarded to Gov. Tanner and our representatives in senate and house, and that every bee-keeper in Cook County by letter or personal call urge their representatives to vote for the passage of the Pure Food Bill.

GEORGE W. YORK,
HENRY M. ARND, } Committee.
FANNIE HORSTMANN,

RESOLUTIONS ON FOUL BROOD.

WHEREAS, The contagious bee-disease commonly known as foul brood is destroying the honey-bees in portions of the State, and is gradually spreading; and

WHEREAS, This, like all contagious diseases, should and must be suppressed by prompt and vigorous means before the honey-bee, one of the most important factors in successful agriculture, and the great apicultural industry of this State is ruined; therefore, be it

Resolved, That the Chicago Bee-Keepers' Association recommends and urges the passage of the law for the suppression of foul brood among bees in this State, which has been introduced in the Illinois legislature by Representative Kumler, of Sangamon County; and known as House Bill No. 103.

Resolved, That copies of this resolution be forwarded to Gov. Tanner and our representatives in senate and house,

and that every bee-keeper in Cook County, by letter or personal call, urge their representatives to vote for the passage of the Foul Brood Bill.

GEORGE W. YORK,
HENRY M. ARND, } Committee.
FANNIE HORSTMANN,

RESOLUTIONS ON THE UNITED STATES BEE-KEEPERS' ASSOCIATION.

WHEREAS, The bee-keepers of the United States have a common interest in the pursuit of apiculture, and the benefits and profits arising therefrom; and,

WHEREAS, A society called the United States Bee-Keepers' Association has been organized, having now about 500 members, and national in character; and,

WHEREAS, The objects of the said association as set forth in its constitution are: "To promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey, and to prosecute dishonest commission men;" and,

WHEREAS, To carry into full effect these various objects of the said organization will require much money; therefore, be it

Resolved, That the Chicago Bee-Keepers' Association in convention assembled does hereby express the fullest confidence in the ability and aims of the officers and directors of the said United States Bee-Keepers' Association, they being eminent in the pursuit of bee-keeping, and well known all over our land for their integrity and enthusiasm in their chosen pursuit; and, be it

Resolved, That each and every member of our Chicago Bee-Keepers' Association, and every bee-keeper in Cook Co., Ill., be, and are hereby advised and urged to join the United States Bee-Keepers' Association, and pay the annual dues to Hon. Eugene Secor, of Forest City, Iowa, general manager and treasurer of the association named.

GEORGE W. YORK,
HENRY M. ARND, } Committee.
FANNIE HORSTMANN,

The first subject—"How I Handle My Bees in Early Spring," was to have been opened by Dr. A. B. Mason, of Ohio, but his paper, which here follows, failed to arrive in time for the meeting by about 12 hours:

How I Handle My Bees in Early Spring.

To the Chicago Bee-Keepers' Association:—

Your secretary has taken the unwarranted liberty of giving me an invitation to attend this meeting of your association, and whether I can be with you or not, to give you a paper on "How I Handle My Bees in Early Spring," and saying that I may aid you "in bringing out some new ideas."

To the first part of his request I should be most happy to respond by being with you, but distance sometimes does more than "lend enchantment," and in this instance prevents my enjoying the pleasure and profit I am sure would be mine if I could be with you, and I shall have to content myself with the hope that I may aid you in bringing out something that may be of use to some of you who may have had but little experience in our truly fascinating, and oft-times profitable, pursuit.

I am glad your secretary didn't ask me to give the best method of caring for bees in the early spring, because I'm sure I should be "called down" by some for not being on the right track, that is, the way *they* do, but I can tell how *I* do, and your most cranky member can't make me lose any sleep over what he may say, for I'll not hear it.

I like to begin to "handle my bees in the early spring," along about the last of the September or first of the October previous to putting them out of the cellar in March or April, and altho it has been a long time since I began my "early spring" handling in any other way, I have not forgotten how I used to fool away my time and damage the bees with my spring foolishness.

Perhaps you'll say I can't begin my early spring work in September or October, but I can and do, and I begin in this way:

Before the first killing frosts come in the fall, while some honey is still being gathered, and as soon as possible after removing the surplus, I thoroly examine every colony for three purposes—to learn as to the exact condition of the colony as regards bees, brood and stores; and as I use an 8-frame Langstroth hive, with a tight bottom-board in summer and no bottom-board in winter, I proceed as follows:

I take a hive-body with a loose bottom-board, and set it

by the side, or in the place of the one to be examined. I then lift out each comb and examine it, and if all is satisfactory I place it in the empty hive, and do the same with each comb, arranging them in this way. If the hive faces the south I put a full comb of honey next to the east side of the hive, and if it faces east I place the full comb at the south side. I then place the combs containing brood next to the one filled with honey, and as near as may be in the same relation to each other as they were before I began the examination. I then fill up the balance of the hive with full combs of honey, or enough to last until an abundant supply comes in the spring.

If there is not such a supply of honey in the hive as will be an abundance for winter stores, I take full combs from supers that have been left without extracting for this purpose. I have followed this plan of preparing my bees for early spring handling for over 20 years.

Then when settled cold weather puts in an appearance, which in this locality is generally about Nov. 12, all are placed in the cellar without bottoms to the hives, where they remain until such time in the spring as they become too uneasy to safely remain longer, frequently remaining in the cellar until many of the soft maples have past out of bloom.

Before removing the bees from the cellar, if I decide to give them spring protection, I place a box made for that purpose on each stand before removing the bees. This box is made of five separate pieces—bottom, two sides and two ends—and these pieces are made of half-inch lumber of any convenient width, being held together with cleats $1\frac{1}{2}$ inches, or less in width, at each end, these cleats being placed at such distance from the ends of the side and end pieces as will allow them to be put together as shown by the sample corner sent with this, the cleats having been cut half an inch shorter than the sides and ends are high. The sides and ends are made of such length as will make the box four inches longer and wider inside than the hive is outside, and about six inches higher than the hive-body. The bottom is made of the same kind of material as the sides, and of such width and length as to go inside the box. The cleats on the bottom are placed at least two inches from each end. The box is held together at the corners by small wire nails or hooks.

When the box is ready, or at any convenient time before wanted for use, the bottom is covered with chaff or fine-cut straw to the same depth as the thickness of the cleats it is put together with, and a hive bottom-board put over the chaff, resting on the cleats and chaff. I keep the box covered from storms with a board made like the bottom, but wide and long enough to project over two or three inches on all sides. The bottom-board to my hives is long enough so that when in place in the box it projects beyond the front of the box which has to be cut to fit it, and makes an entrance to the hive.

In taking the bees from the cellar each hive is set on a bottom-board, and the entrance closed to keep the bees from escaping. The hive is then set on scales and weighed, each having been weighed when put into the cellar. It is then carried to its summer stand, and lifted from its loose bottom and set in place in the box prepared for it.

When all are in place, and the entrance fixed, I fill the space between the box and hive with chaff, or some substitute for it. It takes but a moment to do this, pressing it down just enough so that it will not settle of its own weight.

If I haven't extra bottom-boards I can get along nicely with only one extra one, by having the chaff or other material in place on the bottom of the box; the bottom-board released by lifting the hive from it to place it in the box, can readily be put in the box where wanted.

I use enameled cloth to cover the frames, on top of which is a rimmed cover, and I fill with chaff only to the top of the hive; I then cover the enameled cloth with several thicknesses of newspaper, and replace the cover.

I keep the entrance opened or closed, as the weather may indicate, so as to help the bees maintain a proper temperature in the hive, frequently closing the entrance at night and during cool days.

As soon after the bees have had a good cleansing flight, as the weather will admit, I examine every comb to learn about the strength of the colony, the amount of brood and stores, and whether queenless or not. If I find the colony in a satisfactory condition, I close the hive and let them alone for ten days or more, according to their apparent condition as seen from the outside, or by turning up a portion of the enameled cloth.

If I find any colony short of an abundance of stores and otherwise in good condition, I supply the lack by removing

one or more combs having the least honey and no brood, and supply their places with combs more or less full of honey, that have been saved for this purpose from the previous year.

If I find a colony weak in numbers, but strong enough to be worth building up, I put the bees on as many combs as they can profitably use, and contract the brood-nest with a division-board, making sure that they have plenty of stores. Sometimes I put the colony in the center of the hive, using two division-boards, and fill the spaces between the division-boards and sides of the hive with chaff.

If I find a colony queenless I make the entrance as small as will allow the bees rather a close passage to guard against robbing, and leave it until a pretty cool evening, when I remove the covering of the weakest colony with a queen, and place a queen-excluding honey-board in place of the covering, and when all are quiet carefully set the hive with the queenless colony on it, leaving off the bottom-board. The bees of the queenless colony will readily go to the colony with the queen, and, in my experience, without any quarreling. I have united weak colonies in the winter in the cellar in this way, leaving out the queen-excluder, and had no trouble.

If I find colonies with queens too weak to be profitable, I remove such queens as I care least for, and unite two or more as may seem best, as above, uniting but two at a time.

If I don't find plenty of unsealed honey in the hive I uncap some, unless the bees are able to gather some from the fields, for they seem to build up more rapidly when they have a supply of uncapped honey.

In a week or ten days, more or less as circumstances may indicate, I give another examination as at first, treating them in the same way. Sometimes, but rarely, I find too much honey in the hive, being so full that the queen does not have the room needed for depositing eggs. In such cases I replace one or more combs of honey with empty, or nearly empty, ones, always leaving an abundance of stores.

If I do not give spring protection I do just the same as where protection is given, only that when I give the first examination I furnish each colony a hive with a tight bottom in this way:

I nail a bottom to a hive-body with four nails an inch and a quarter long. That will hold the bottom on firmly, and still permit of its easy removal when I prepare the bees for winter quarters. I remove the colony I wish to examine from its stand, usually placing it in the rear of where it was, and place the empty hive with the tight bottom in its place. I then proceed to remove the combs from the full hive to the empty one, examining them and arranging the entrance according to the needs of the colony, and the weather.

When the combs have all been removed from the old hive, any remaining bees are brushed or shaken into, or down in front of, the new hive.

The loose bottom is then nailed to an empty hive which is then ready for the colony next examined. This process is repeated until all have been examined, and each colony is treated in the same way as where spring protection is given, but I much prefer to have all colonies protected.

I keep a record of everything I do to a colony, and also what it does. This record I keep either on a piece of heavy card-board, a piece of section, or a small piece of smooth, thin board, like a piece of planed shingle.

Your secretary didn't ask me to give any reasons for my way of doing, but perhaps he will allow me to say that after a good deal of experience in stimulative feeding in the spring, I have found that with plenty of sealed stores in the hive the bees will do the best for me in getting strong colonies. Of course, the queen must have room to "spread herself." I have also experimented in spreading brood to hasten brood-rearing, but it takes too much time and attention to make it at all profitable for me.

Lucas Co., Ohio.

A. B. MASON.

(Continued next week.)

Queenie Jeanette is the title of a pretty song in sheet music size, written by J. C. Wallenmeyer, a musical bee-keeper. The regular price is 40 cents, but to close out the copies we have left, we will mail them at 20 cents each, as long as they last. Better order at once, if you want a copy of this song.

The Premium offered on page 254 is well worth working for. Look at it.

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

[The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.]

T Supers Shorter than the Hive.

In your answer to "Missouri" on page 279, you say: "No, the T supers are shorter than the hives and don't need anything to fill out the ends." I would like to know what kind of supers you use shorter than the hives. Mine are the same length as my hives and I don't need anything to fill out to the end. The case holds 24 sections, and they fit up close to the end. I would like to have some more of them, but I believe the manufacturer has gone out of the business. Do you know of any one that is making that style? I sent to Mr. — for some T supers, and he sent me some slat supers, and I don't like them a little bit. I want nothing but T supers with the T turned upside down when in use.

IOWA.

ANSWER.—The T supers I use are of the plainest kind, the sides and ends being of $\frac{3}{4}$ stuff and the inside measurement $17\frac{1}{2} \times 12\frac{1}{2}$. Of course that must be shorter than a hive that takes frames $17\frac{1}{2}$ long. Some object to the looks of a hive with a shorter super on it, but it isn't best to sacrifice too much for looks. If yours are the same length as your hives, the super being for $4\frac{1}{4}$ sections, and the hive taking frames $17\frac{1}{2}$ long, then the ends of your supers must be made of stuff thicker than $\frac{3}{4}$. I prefer to dispense with the additional weight, even if it doesn't look quite so well. I think you ought to have no trouble in getting T supers from any of the leading manufacturers. Certainly no one should send you slat supers if you order T supers. Possibly you merely ordered supers without specifying what kind, for Mr. — is agent for —, and they have T supers in their list. But they make the super the same length as the hive by adding a cleat at each end, which is not a bad plan.

Combs of Honey Left by Dead Colony.

I have eight frames of comb left by a colony that died recently; they are all partly filled with honey and some are mildewed. What can I do with them? If I put them under a colony will not the queen take possession and lay there? Or can I have a swarm on them in their moldy condition?

JERSEY.

ANSWER.—Nothing would be more desirable than to have the queen take possession and lay in the combs, if she needs the room. If desired, however, an excluder could be put between the two stories. It would be better to have the bees clean up the combs before offering them to swarms, as a swarm is more fastidious about such matters than a colony having brood, and might not be willing to stay on mildewed or moldy combs.

What to do with Empty Combs.

I lost some bees the past winter, and they left some nice, bright combs. What can I do with the empty combs?

KENTUCKY.

ANSWER.—There is no better way than to let the bees of a strong colony take care of them till swarming-time. See reply to "Cary," on page 311.

Making Increase by Dividing.

Would you advise in making one increase from each parent colony as follows, to take one frame which has the queen and bees on it and put into a new hive just when the old colony has new queen-cells started? I don't wish to buy a new queen for the old colony. I have movable-frame hives.

INDIANA.

ANSWER.—Of course it will cost you less money to follow the plan you propose than to buy new queens. Whether it will work all right depends somewhat upon further details. If you mean that as soon as you find queen-cells

started you'll take one frame of brood with adhering bees and queen, put it into a new hive on a new stand, leaving the old hive without further attention, it won't do at all. But you might wait till one or more cells are about ready to be sealed (the difficulty is to know just when that is, for as soon as one is sealed the colony is likely to swarm), then put your frame with brood, bees, and queen into the new hive, brushing into it also about half the bees from the old hive, set it on the stand of the old hive, leaving the old hive beside it, and a week later take the old hive away and set it on a new stand. There would be no advantage in that over letting the bees swarm naturally, but from your question it is a possible thing that you cannot be on hand to take care of the swarms.

Young Bees Thrown Out.

1. Mornings, when I go to my bee-yard, I find young bees on the bottom-board dead. Some are white yet and some are brown. What is the trouble?

2. I find some worms on the bottom-board. Do they crawl out, or do the bees carry them out? NEW JERSEY.

ANSWERS.—1. If there are many of them, it is to be feared that the bees are about at the starving-point, and are sucking out the juices of the larvae and throwing out the skins. If, however, they are fully matured young bees—which may be the case from your saying some are brown—then the probability is that the wax-worm has made the trouble by making its silken galleries through the brood-combs.

2. Likely they were thrown out of the combs by the bees.

Black and Mouldy Combs.

I wish to ask about two colonies I bought one month ago. They were in very poor shape, and after it got warm enough to examine them I found the combs mostly all black and mouldy, and dead bees piled up on the bottom between the combs. I got them into a clean, new hive all right, and they seem to have started to work. Of course, I had to put the old frames that had honey in them into the new hives with some frames of foundation, but the combs in the old frames are all out of shape, and I wish to have them replaced with new frames with sheets of foundation. Will it be safe to take them away from the bees when the fruit-trees are in bloom? or when would be the best time to do it?

WISCONSIN.

ANSWER.—If your bees are busy on fruit-bloom or any other flowers, you may make the change at once, but likely you may as well wait till they are at work on clover. Indeed, it will be easier to make the change when the colonies are stronger, and you must look out not to waste any worker-brood that may be in the old combs. One way is to have these crooked combs with brood in another story either above or below the one the queen is in, with a queen-excluder between. The combs that have no brood in them may be taken away at any time without ceremony, providing it doesn't take away honey that they need. But don't feel troubled about the blackness of the combs. That's just what the bees like.

Entrances in the Supers—Excluders.

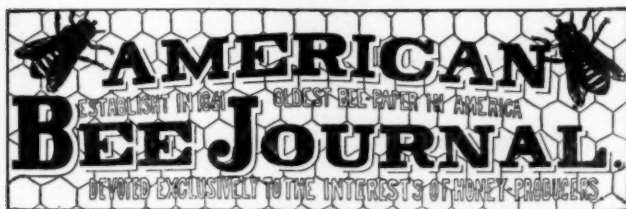
I am desirous of knowing whether, if in running for extracted honey and using honey-boards, the bees would gather, or rather fill up the supers, more readily, if the entrances were made in them? If this would not work well, how should I go about it? Do you think I would obtain more honey by not using excluder-boards?

We are having a fine season of it this year. Bees are gathering immensely from the logwood (which we have in abundance). I shall take pleasure in sending a sample of this (logwood) honey, next mail. JAMAICA, April 25.

ANSWER.—Entrances in supers from outside have been tried, but I don't remember that any one who has tried them has reported favorably. There seems to be a desire on the part of the bees to enter where the brood is. Moreover, if bees entered supers without first entering the brood-nest, they might put more pollen in supers than would be desired. It's better to have no pollen in extracting-combs.

The general opinion is that it is better to use excluders, and that they are no great hindrance. If you have your brood-chamber large enough, there is not so much need of excluders.

GEORGE W. YORK, Editor.



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United States Bee-Keepers' Association.

Organized to advance the pursuit of Apiculture; to promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

EXECUTIVE COMMITTEE—Pres., E. Whitcomb; Vice-Pres., C. A. Hatch; Secretary, Dr. A. B. Mason, Station B, Toledo, Ohio.

BOARD OF DIRECTORS—E. R. Root; E. Whitcomb; E. T. Abbott; C. P. Dadant; W. Z. Hutchinson; Dr. C. C. Miller.

GEN'L MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

Place and Date of Next Meeting:

IN FRANKLIN INSTITUTE,
15 South 7th Street, between Market and Chestnut Sts., Philadelphia, Pa.,
September 5, 6 and 7, 1899. Every bee-keeper is invited.

VOL. 39.

MAY 25, 1899.

NO. 21.



NOTE—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

The Canadian Pure Honey Bill.—The text of this bill, for which S. T. Pettit worked so hard, is given in the Bee-Keepers' Review and in Gleanings, in which appears the following proviso:

"Provided that this Act shall not be interpreted or construed to prevent the giving of sugar in any form to bees, to be consumed by them as food."

This does away entirely with the charge that the bill was intended in any way to punish a man for feeding needy bees.

"Supply-Dealing Editors" is the heading of an editorial in Gleanings in which Editor Root "talks back" a little to Messrs. Doolittle and Hutchinson, who seemed to feel a brake was needed with reference to booming new things. He says fence separators are no new thing, nor are plain sections. For about ten years plain sections have been used by Mr. Aspinwall, and fences by Miles Morton. B. Taylor, W. S. Poudner and others advocated the same general scheme years ago. He mentions that thick top-bars had been used by J. B. Hall and others for years before Dr. Miller and he began to push them, and he gets in a sly dig at Doolittle, by saying that Doolittle at first opposed these same thick top-bars and now advocates and uses them. He does not claim that drawn foundation was an entire success, but as the experiments and necessary machinery

cost \$2,000, and less than 200 pounds of the product were sold, thus making the loss fall upon the manufacturers, he thinks bee-keepers ought not to complain very bitterly, especially as the new thin-base foundation has resulted. Even if some of the things advocated have been abandoned, Mr. Root says:

"In order to make progress in any branch of industry, some things have to be tried and discarded. In the apicultural world it would be strange if something did not have to be thrown overboard."

The Official Year-Book.—The Department of Agriculture's Year-Book is ready for distribution. An edition of 500,000 copies has been provided, of which 470,000 will be at the disposal of congressmen. Write your senator or representative in congress, therefore, for a copy of this work. It is of unusual interest and value this year.

The Adulterated Food Investigation, which we mentioned last week, closed for the present here in Chicago, Friday, May 12. On that date we, with Secretary Moore and Vice-President Mrs. Stow, of the Chicago Bee-Keepers' Association, appeared before the Senate inquiry committee, to testify concerning the adulteration of honey as practiced here in Chicago. The Evening Post of May 12 had the following condensed report of the proceedings, which of course doesn't show nearly all of the testimony given:

ADULTERATION OF HONEY.

The early part of the session was not unlike a convention of bee-keepers. Up to nearly noon the committee was hearing statements from bee-keepers as to the adulteration of honey. George W. York, editor of the American Bee Journal, said to the committee this practice was being carried on at present to an alarming extent. It was not the bee-keepers, he said, who were doing this, but the jobbers almost exclusively. The only adulterant he knew of that was used was glucose, and the fact that the jobbers were resorting to fraudulent methods, in his mind, was ample proof that some legislation is necessary to protect the bee-keepers. The object of adulterating honey was solely for pecuniary purposes. Glucose, he said, was worth probably one cent a pound, while pure honey in the liquid was worth 7 or 8 cents. Only in the liquid form, he thought, was there any adulteration. That honey which is bought in the comb is always reliable, because there is no way for manufacturers to successfully imitate the work of the busy little insects in making combs. Some jobbers, he said, put some honey in the comb into a glass jar and poured glucose over it, giving it an appearance as if the honey had run out of the comb into the jar. The presence of comb in such quantities of liquid honey was in itself, witness stated, ample proof that it had been adulterated, for no "first-class" bee-keeper ever put up liquid honey mixed with the comb.

Senator Harris asked witness if any attempt ever was made to feed bees with glucose in order to make the product larger. Mr. York told of an instance where 300 colonies of bees were taken into Mississippi, and an attempt was made to feed them with glucose. The result was that all died. It would be useless to try this experiment, he said, because bees would not eat glucose to any great extent.

NO PRESERVATIVES ARE USED.

Witness said no preservatives were used in honey; that there was a great possibility of honey granulating, but so far as he knew there was nothing done to prevent this, excepting to abstract the honey from the comb and put it on the market in this form. He quoted a statement from one of the adulterators of honey, who said the honey he put on the market for his customers contained seven-eighths glucose and one-eighth pure honey, which he considered really was glucose adulterated with honey, rather than the reverse; but it was sold as "honey."

The only aid the bees are given in producing honey, according to Mr. York, was the furnishing by the owners of a base for the combs. These manufactured bases are the size of the box which contains the honey-comb, and are placed in the middle of the box to help out the insect, as well as to guide it in making perfectly straight tiers of cells. These bases are made of beeswax, and are perfectly pure,

according to witness. There had been experiments made, he said, with a mixture of paraffine and beeswax, but the former had proved too susceptible to heat, and would not answer the purpose at all.

Mr. York was followed by Mrs. N. L. Stow, of Evans-ton, who is vice-president of the Chicago Bee-Keepers' Association. Mrs. Stow has kept 80 colonies of bees, and her knowledge of the industry has gained for her the position she holds. Her testimony corroborated that of Mr. York, as also did that of Herman F. Moore, secretary and treasurer of the association, who took the stand after Mrs. Stow had finished.

It is the intention of the Senate committee to print all the testimony they may gather as to the adulteration of all kinds of food, and present it to Congress at its next session, and then doubtless an attempt will be made to enact a national anti-adulteration law. We endeavored to impress upon the committee the urgent need of statutory law against all forms of adulteration, including honey, of course. We hope that our testimony will do good. We were glad of the opportunity to give the committee all the information we possibly could.

Mr. Moore and the writer gathered up about a dozen samples of honey—both adulterated and pure—which we placed before the committee. Prof. Wiley suggested that we forward them to his laboratory in Washington, where he would analyze them and then report.

The Reformed Spelling.—Mr. Stenog, in *Gleanings*, has this comment on our spelling-reform effort:

Mr. York spells "burr-comb" with one *r*, but spells *fuzz* with two *z*'s, instead of *fuz*. Why not go the whole length and spell it *cel*, *wil*, *be* for *bee*, etc.? The new spelling is certainly misleading when *past* is used for *passed*. A law that was *past* last March has ceased to be a law at that time.

Does Stenog object to going by the dictionary? "Bur" is given as correct spelling in the Standard, but "fuz" cannot be found there. There is no objection whatever, "in this locality," to spelling *cel*, *wil*, and *be* for *bee*, unless it be that some people are so conservative that they prefer to hold on to the old no matter how bad it is. Some printer's ink is wasted in printing *cel*, *wil*, and *bee*. As to *passed* and *past*, there's no need of spelling a word wrongly just because it has two different meanings. Perhaps Stenog would like *bat* spelt with two *t*'s when it has wings, so we will know he is not talking about a ball bat. Most people who have learned how to read, know the sense intended simply from the particular way in which a word is used that has different meanings, tho spelt the same. Of course, Stenog, who writes shorthand, *always* writes "past" for "passed" when taking dictations. Pretty good joke on him, when he criticises a spelling that he uses himself, and must necessarily endorse.

It's a fine thing for *Gleanings* that Stenog isn't several hundred years old, for if he were he would still want to keep on spelling as they did in the 16th century, a sample of which we reproduce here, showing how the first ten verses of the eighth chapter of St. Matthew were once printed:

When Iesus was come downe from the mountayne, moch people followed him. And lo, ther cam a lepre and worshiped him saynge: Master, if thou wylt thou canst make me cleane. He putt forth his hond and touched him, saynge: I wyl, be cleane, and immediatly his leprosie was censed. And Iesus said vnto him: Se thou tell no man, but go and shewe thy self to the preste, and offer the gyfte that Moses commaunded to be offred, in witness to them. When Iesus was entred into Capernaum there cam vnto him a certayne Centurion, beseeching hym and saynge: Master, my seruaunt lyeth sicke att home of the palsye, and is greuously payned. And Iesus sayd vnto him: I wyl come and cure him. The Centurion answered and saide: Syr I am not worthy that thou shuldest com vnder the rofe of my housse, but speake the worde only and my seruaunt shalbe healed. For y also my selfe am a man vnder power, and have sowdeers vnder me, and y saye to one, go, and he goeth, and to another, come, and he cometh; and to my seruaunt, do this, and he doeth it. When Iesus herde these sayngs, he marveyled and said to them that folowed him, Verely y say vnto you, I have not founde so great fayth: no, not in Israell.



MR. R. F. HOLTERMANN, of Ontario, Canada, editor of the Canadian Bee Journal, writing us May 11, said:

"The prospects here for honey are excellent, and I do not know that the bees were ever in better condition, or had more favorable weather since the growing season came on."

DR. C. C. MILLER, of McHenry Co., Ill., spent Monday night, May 15, with us, when on his way to attend the annual convention of the Illinois Sunday School Association, at Decatur. The Doctor was feeling well physically, and is as good-natured and young-hearted as ever. He lost about half of his bees in wintering, owing to honey-dew stores, principally, he thinks. He put 280 colonies into the cellar last fall, so his loss amounts to quite a good-sized apiary.

MR. FRANK ZILLMER, one of our subscribers and a bee-keeper of Crawford Co., Wis., was recently married to Miss Emily Birchard, of Grant County. The local paper, after announcing the event, remarks as follows:

"The bride is well known to our readers, and has a host of friends who join with us in wishing her and her husband (who is a very successful apiarist) bon voyage thru the journey of life. Mr. and Mrs. Zillmer will remove at once to their new home, where everything is in readiness for housekeeping."

We wish to add our congratulations and best wishes to the happy couple. We trust that their troubles in life may be ONLY LITTLE ONES, that afterward may prove to be blessings.

MR. J. H. MARTIN—equally well known by his other name—Rambler—says this in *Gleanings*:

"We think we are doing the appropriate thing in Southern California when we have a bee-keeper by the name of Honey; but in the northwest portion of Oregon there is a town named Apiary; also a man bearing the same name."

We wondered when we read the above paragraph whether in that Honey family there were any marriageable daughters. If so, we haven't the least doubt that Rambler knows all about them. He's a great investigator, and would be particularly so when it came to a young lady who is sweet both in name and nature. But to exchange so mellifluous a name as "Honey" for that of Martin or Rambler—I doubt if she could be persuaded. You'd better ramble on, Mr. Rambler."

MR. R. C. AIKIN, of Larimer Co., Colo., writing the *Progressive Bee-Keeper*, April 27, 1899, had this to say for himself:

"As you already are aware, I am a very busy man, and to add to my many duties, I have just past thru a political campaign in which I was not only a worker, but was on the ticket, and am now 'in for it' to serve our little city as a councilman for the next two years. May the Lord help us to rout every whisky-selling scheme that dares to ply in our midst. We won the election with a full ticket and a round majority."

We wish to extend to Mr. Aikin the heartiest kind of congratulations upon his political success. We hope he and his fellow councilmen will have the courage to enforce the laws they have, and make better ones if they need them. We think the quickest way to educate a community up to the level of good laws, and a desire to see them enforced, is just to enforce them for awhile and thus demonstrate to the people the pleasure to be derived from living in a respectable town or city. It is now 15 years since we lived in a place where the laws were enforced. Here in Chicago it is almost true to say that only the laws that suit the politicians are enforced. No attempt whatever is made to close on Sunday the front entrances to hell (saloons), tho there is a State law that would close them if enforced. And it makes no difference which party is in power here, as elsewhere—both want the saloon vote, and so cater to it.



Painting Queens.—Instead of clipping the queen's wings, C. Boesch advises in D. Imker to paint her thorax a bright color. That would make it easy to tell whether a queen had been replaced by the bees, and in case of a runaway swarm it would be possible to prove property.

More Wax and Less Honey is somewhat favored by W. A. H. Gilstrap, in Gleanings. He gives some figures which seem to show that under some circumstances, instead of extracting and saving the combs to use over again, it is possible it might be better to melt up the whole and get more than twice as much wax.

Density of Buckwheat Honey Varies in different localities, according to a discussion reported in the Canadian Bee Journal. Mr. Brown said it was thinner than other honey. Mr. Darling had it average 14 pounds to the gallon, and so thick that he could lift 1½ pounds with a spoon. In a dry season it was said to be thicker than in a wet one.

Importance of Good Queens is urged by J. J. Cosby, who rears his queens by the Doolittle plans and thereby accounts for the fact that his bees in a poor season secured 72½ pounds per colony, spring count, and increased from 80 colonies to 100, while a neighbor with 23 colonies got 56 sections in all, and another neighbor with 60 colonies got nothing, all three apiaries working on the same field.—Gleanings.

Bees and Colors.—Elias Fox discusses this matter in Gleanings. He gets many stings with black pantaloons, but very few with light ones. A black ribbon or feather worn by his wife is a distinct point of attack. If he wears no

veil, the attacks will be upon the mustache, eyes, eyebrows, or right under the hat-rim, and nine times out of ten a sting on the hands will be near or under the shady edge of the sleeve. A team of horses past his apiary; the white horse escaped with few stings, while the dark bay with black mane and tail was stung to death.

Taking the Travel-Stain Off from the surface of section honey, according to an editorial in Gleanings, is a thing that may yet be accomplished. Byron Walker is confident that he has discovered a successful method. If it is true that the dark color of sections is due to bits of old comb brought up from the brood-combs, it hardly seems that the sections can be made white otherwise than by reversing the process and removing the outer portion, a thing that seems hardly possible of accomplishment. Mr. Walker will certainly do a great service if he gives a successful plan.

The Hungarian Bee is praised in Bienen-Vater by Maurus. An inexperienced eye cannot distinguish it from the Carniolan. But its flight is different. It goes straight as an arrow, while the Carniolan has a more circling flight. It is grayer than the Carniolan, with yellowish rings and yellowish down. In southern Hungary it is almost as highly colored as Italians. It is more inclined to swarm than the Italian, but less than the Carniolan. It also holds middle ground between the Italian and the Carniolan as to the amount of brood reared. Among the places to which it has been sent are mentioned Illinois, Ohio and Kentucky.

Albinos as to Wintering.—J. O. Grimsley reports, in the Ruralist, that the winter in Tennessee was exceptionally severe, the mercury at one time going down to 20 degrees below zero. In an apiary composed of albinos and Italians he reports the loss not so heavy as expected, but says:

"To our surprise it was confined mainly to the albinos. A few light colonies of Italians were lost, and we barely 'saved seed' of the albinos. We were not surprised so much at the loss of albinos, as we expected a greater loss all around, but the test has proven that for the extreme North and severe winters, albinos must be well protected.

Hildreth & Segelken, JOBBER AND COMMISSION MERCHANTS..... HONEY, Beeswax, Maple Sugar and Syrup.

120-122 W. Broadway,
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We desire to inform our friends and patrons that our firm has been re-organized and additional capital added. The business will be conducted under the firm name and style of

HILDRETH & SEGELKEN,

at the old stand, where we have had the pleasure of serving our friends for the past 11 years. Management and supervision will be the same and our business methods—those of square and honest dealings—will be practiced as heretofore.

We believe we have now the esteem and confidence of our shippers throughout the country, and that our dealings, as a rule, have been of the most pleasant nature.

Our additional capital will put us in position to increase our already large business still farther, if possible, and at the same time enable us to treat our shippers even more liberally than heretofore, in making advances, etc.

Records will show that we handle by far the bulk of all the honey sent to our market. We make honey the principal part of our business, are personally acquainted and have trade connections all over the country, which enable us to handle any amount of honey to better advantage than any other house.

Old shippers know us and will bear us out in what we have said. Those bee-keepers who do not know us and have had no dealings with us, we would cordially invite to correspond with us and make our acquaintance. We not only handle on commission but buy largely as well, from small lots to carloads, for spot cash.

We wish to call the attention of the Southern bee-keepers to the fact, that our market never was in better condition than this season. Old stock is disposed of and the market is bare, with a good demand. New crop will find ready sale and at higher prices than have ruled for years past. We would advise them to send their honey, while there is a good demand at good prices, as later on conditions of the market may change.

We also handle **MAPLE SUGAR AND SYRUP** very extensively, and would be pleased to hear from those having any of these goods to offer.

In conclusion, we wish to extend our thanks to all of our shippers for their past favors, and trust to receive their kind consideration in the future.

21A4t Please mention the American Bee Journal.

Root's Column

ENTIRELY UP WITH ORDERS

Our extensive enlargements last fall, costing in the aggregate some \$15,000, enables us to keep pace with our increasing trade. Send in your orders, and they will be promptly executed, either from the main office or branches and agencies. Give us a trial, and see how quickly we can make shipment.

SAVE FREIGHT

By Buying at the Nearest Branch or Agency.

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MAIN OFFICE AND WORKS:

MEDINA, OHIO.



GENERAL ITEMS

The Farmer.

What higher fate for man can wait
Than 'neath the overarching sky
To sow and reap, to tend and keep
The fertile fields that round him lie?
Small pleasure springs from joys of kings
And richer is his lot by far,
Whose life is spent in sweet content
Where hearth and home and loved ones are.
—Farm Journal.

Apiculture Prospering.

I could not help noticing what a change there is in the "Old Reliable;" it seems it is crowded more and more with such valuable information, especially the last two weeks.

Bees are now about getting up to their original working order. Prospects are good for a fine honey year. White clover is beginning to bloom, and locust also in full bloom. Everything pertaining to apiculture seems to be prospering, and if we have a few seasonable rains the bees and we will do the rest.

J. WILEY MOUNTJOY.
Anderson Co., Ky., May 11.

Severe Winter on Plants and Trees.

The past winter was perhaps more severe on plants and trees than any other year in the memory of "the oldest inhabitant." Roses called hardy were killed to the ground, altho well protected. Many soft maple trees are badly injured, and I think many ash trees are killed outright. Farmers report that red clover is almost entirely killed, but, somewhat strangely, white clover seems to be uninjured. C. C. MILLER.
McHenry Co., Ill., May 20.

Bad Weather for Bees.

The weather has been very bad for the bees. We have had just a few days that they could work with any comfort.

LEWIS LAMKIN.

Woodbury Co., Iowa, May 16.

Bees Wintered Poorly.

Bees wintered very poorly here the past winter. My neighbor lost 60 colonies out of 65. I lost one-half, which is 50 colonies. My bees are now in very good good shape. The American Bee Journal is the boss of all the bee-papers I ever read.

OLIVER CARON.

Red Lake Co., Minn., May 14.

Wintered Without Loss.

My four colonies of bees wintered on the summer stands packed in chaff and sawdust without any loss.

A. SHAW.

Grant Co., Wis., May 14.

Shake?—What's the Use?

Have you ever reflected on the uselessness—nay, the absolute danger attending the usual promiscuous hand-shaking? It is a meaningless custom with the majority of people, in which no sentiment or genuine interest enters. This fact is apparent enough on the mere observation how this perfunctory salutation is accomplished.

Two persons meet who entertain no special regard for each other, but each extends a "flipper" and mechanically shake each others' fingers. What's the use?

But let us consider the more dangerous results that not infrequently occur. Here comes a man with whom you shake. In a week or two your hands begin to tingle and soon you find you have caught the itch! This you generously give to your family and friends to keep them busy scratching. Eczema is often contracted in this neigh-

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (melilot).....	60c	\$1.00	\$2.25	\$4.00
Alsike Clover.....	70c	1.25	3.00	5.75
White Clover.....	80c	1.40	3.00	5.00
Alfalfa Clover.....	60c	1.20	2.75	5.00
Crimson Clover.....	55c	.90	2.00	3.50

Prices subject to market changes.

Add 25 cents to your order, for cartage, if wanted by freight.

Your orders are solicited.

GEORGE W. YORK & CO.
118 Michigan Street, - CHICAGO, ILL.

SILVER GRAY CARNIOLAN QUEENS

—ALSO THE—
Golden and 3-banded Italian.

Untested, 50c each; tested, 75c. Purity of stock and safe arrival guaranteed.

C. B. BANKSTON, - Rockdale, Texas.
13Atf Please mention the Bee Journal.

HATCH CHICKENS
BY STEAM—with the simple, perfect, self-regulating
EXCELSIOR INCUBATOR
Thousands in successful operation.
Lowest priced first-class hatcher made.
GEO. H. STAHL,
114 to 120 N. 6th St., Quincy, Ill.

44A26t Please mention the Bee Journal.

ALBINO QUEENS If you want the most prolific Queens—If you want the gentlest Bees—If you want the best honey-gatherers you ever saw—try my Albino. Untested Queens in April, \$1.00; Tested, \$1.50. 9A26t
J. D. GIVENS, LISBON, TEX.
Please mention Bee Journal when writing.

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Thorobred—Fine Plumaged Fowls—Farm Raised—75 cents per dozen.
11A1f MRS. L. C. AXTELL,
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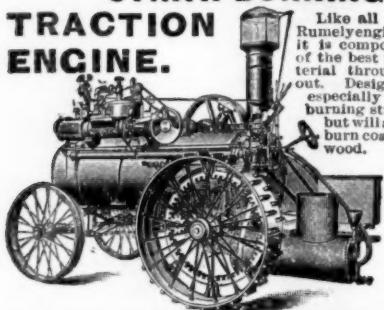
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And other Supplies, and get my prices. You will get the best goods and save money. Illustrated Catalog Free. BEESWAX WANTED.

GUS DITTMER, Augusta, Wis.
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THIS IS THE NEW
RUMELY
STRAW BURNING
TRACTION
ENGINE.



Like all the Rumely engines it is composed of the best material throughout. Designed especially for burning straw but will also burn coal or wood.

Specially constructed boiler, presenting largest heating surface. It is a quick steamer. One of remarkably high power and efficiency, requiring the minimum amount of steam. Five-foot drive-wheels with 16-inch face. An efficient spark arrester prevents all danger from fire. The usual Rumely high finish. We make also other traction engines, portable and stationary engines; the famous "New Rumely Thresher," Horse Powers and Saw Mills. All are fully described in our illustrated Catalogue—FREE.

M. RUMELY CO., La Porte, Indiana.

Please mention Bee Journal when writing.

2-frame Nucleus with Untested Queen, \$2.25.

Untested Italian Queens, 65 cents each. Ready May 1, 1899. Have orders booked now, and get bees when wanted.

F. J. GUNZEL, Obeart, Craighead Co., Ark.
15Atf Please mention the Bee Journal.

BEES QUEENS
Smokers, Sections, Comb Foundation And all Apian Supplies cheap. Send for FREE Catalogue. **E. T. FLANAGAN, Belleville, Ill.**
14Aly Please mention the Bee Journal.

Northern Queens.

IF YOU want the best honey-gatherers, the longest-lived and hardiest Queens, try a few of my **Northern-bred Italians**—"daughters of imported Queens." Tested Queens, \$1.50; untested, \$1.00; 2-frame Nuclei with tested Queen, \$3.00 each; the same with untested Queen, \$2.25. Ready to fill orders by June 1. Correspondence solicited.

MATE WILLIAMS,
20A4t NIMROD, Wadena Co., MINN.
Please mention Bee Journal when writing.



THE WHITE MAN'S BURDEN
of responsibility to the fence question is discharged to the extent that the **Page** is introduced. Have you taken it up?
PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.
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Root's Goods at Root's Prices.
POUDER'S HONEY-JARS and everything used by bee-keepers. Prompt Service—low freight rate. Catalog free.

WALTER S. POUDER,
512 Mass. Ave.,
INDIANAPOLIS, INDIANA.

Please mention Bee Journal when writing.

borly fashion. Nor is that the worst. Here comes an exuberant chap whom you may never have seen, but shake he will. You take hold of his hand in good country fashion, to soon learn what a clammy, slimy thing you've had hold of. May as well shake the tail of a fish. But note that eruption on his hands, and the evil smell he has imparted to yours! If in your enthusiasm you have not thereby contracted a case of syphilis that will cost you \$100 to cure, it has simply been a matter of good luck rather than good judgment.

I have been vexed more than once at my cowardly weakness in not refusing to shake hands with some, when I instinctively desired to go and wash my hands immediately afterward. The nastiness was abhorrent! I have learned, however late, to ignore the extension of an unknown hand to me. I simply don't see it, and go on saying what I otherwise would. This seldom gives offence.

Next to the women's habit of kissing (even women they dislike), promiscuous hand-shaking is the most repulsive.

DR. PEIRO.

Bees Doing Fairly Well.

Bees are doing fairly well. It is very dry, and we have to feed. I have about 300 colonies.

E. H. STURTEVANT,
Washington Co., N. Y., May 10.

Bees in Fine Condition.

My bees never were in finer condition at this time of the year, and I only wish I had been prepared to get some of this fine willow honey in the section boxes.

MATE WILLIAMS.

Wadena Co., Minn., May 12.

Good Prospect for Honey.

It has been rather discouraging so far. The loss of bees around here is about 50 per cent. My loss is three-eighths. North of here there seems to be nothing but beeswax left. Prospect for honey is good.

GUS DITTMER.

Eau Claire Co., Wis., May 12.

Great Mortality Among Bees.

I am sorry to record the great mortality among the bees in this locality. Nearly all the bees have died, fully four-fifths, if not more, have succumbed either to the long, cold winter, or honey gathered from sources that proved destructive to bee-life. I think perhaps both combined may have added to the great loss. What few colonies survived the ordeal seem to be weak, and will need good nursing to bring them thru. I had 38 colonies, part of them in the cellar; out of that number I have three left, and two of them are very weak. All that were left on the summer stands perished. One of my neighbors had about 65 colonies, and he has three or four left, and they are weak. So it is all over this county, so far as I can hear, many having lost all. The weather is against us now, as it is cold and quite rainy. Fruit-trees are in bloom, but are of little account to the bees—too wet and cold for them to be out much.

L. ALLEN.

Clark Co., Wis., May 10.

What I Know About Honey-Dew.

I have seen honey-dew fall more than a score of times, not as dew, but just like small drops of rain, and I have seen it fall on the leaves of the trees and spatter just as a drop of rain will; then the dew at night thins out so that it spreads over the whole surface of the leaves, and while it is damp the bees gather it. They can't gather it when it is dry and hot.

This is not theory; any man can see it for himself if he will take the trouble to step out to some clear place, when there is a heavy flow of it, and look under the sun on a bright, clear evening from four o'clock till sunset. Don't get where there is timber lest you think it falls from the trees. My

WE

are kept very busy—the result of the satisfaction we always give our customers.

HAVE

you had our Catalog yet? If not, you had better get it. Sending out Catalogs never

TROUBLES

us, as we are anxious to place our prices and goods before the bee-keepers of the Northwest. Most of our stock is

OF OUR OWN

make, and always gives satisfaction. Write us a card, and we will send the Catalog at once.

Standard Lumber Co.

10Atf MANKATO, MINN.

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Italian Queens

Reared by the Doolittle method from the BEST HONEY-GATHERERS. Untested, 50 cents each; \$6.00 per dozen. Safe arrival and reasonable satisfaction.

W. J. FOREHAND,
20A11t FORT DEPOSIT, ALA.
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Root's Goods at Root's Prices.

Langstroth Hives and everything pertaining to same.

Muth Jars, Muth Honey Extractor—in fact everything used by bee-keepers. Send for our Catalog.

C. H. W. WEBER,
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Successor to
CHAS. F. MUTH & SON and A. MUTH.

Honey and Beeswax Wanted.

15Atf Please mention the Bee Journal.

CHAS. F. MUTH & SON.

I wish to announce to my friends and patrons that I have this day sold to C. H. W. WEBER, of Cincinnati, my Honey and Bee-keepers' Supply business, known for the past 38 years as CHAS. F. MUTH & SON. Mr. Weber will continue to push the Langstroth hive and everything pertaining to same; besides, he has secured the agency for Mr. Root's goods, and will sell them at his prices. I beg the customers of the old house, to whom I wish to extend my thanks, to continue their patronage with Mr. Weber, by whom I am sure they will be accorded fair and honest treatment.

MRS. ANNIE MUTH (Widow.)
Cincinnati, Ohio, April 7, 1899. 15Atf

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Instructions to Beginners, &c., free.
JOHN NEBEL & SON,
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PATENT WIRED COMB FOUNDATION

Has no Sag in Brood-Frames.

Thin Flat-Bottom Foundation

Has no Fishbone in the Surplus

Honey.

Being the cleanest is usually workt

the quickest of any foundation made.

J. A. VAN DEUSEN,

Sole Manufacturer,

Sprout Brook, Montgomery Co., N.Y.

BEE-KEEPERS! Let me send you my 64-
page CATALOG for 1899.
J. M. Jenkins, Wetumpka, Ala.

Bees FOR SALE

Write me soon.

20A4f H. LATHROP, BROWNTOWN, WIS.
Please mention Bee Journal when writing.

bees gather it and I have no more trouble selling it than I do what they gather from flowers.

Now a word about "bug-juice": Has any man taken pains to see which comes first, the bugs or the juice? We see them on sprouts and we see juice also, and if I am not laboring under a great mistake the bugs are only scavengers. I have had two seasons' observation and the bugs were second both seasons. Now I will explain how it was:

There are cherry and plum sprouts growing right in my bee-yard, and when a sprout is very thrifty I see on the tender taps, from six to eight inches down, that a sticky substance exudes from both stem and leaf on the top and bottom, and I have tasted it, and it was sweet, like honey. There was not a living thing on it, but in two or three days I would see some small insects on it, and in three or four more days the whole of the stem and all the underside of the leaf would be black with them.

W. T. ALEXANDER.

Ozark Co., Mo., May 10.

Safe In-Doors—Loss Out-Doors.

Bees wintered in the cellar with but little loss, and are in good condition now. Those left out-doors are all dead.

J. N. SHEDENHELM.

Iowa Co., Iowa, May 12.

Honey-Dew on Cotton—Swarming.

For some time now there have been several articles on honey-dew in this journal, and the same subject has been commented on during conventions.

I am living in the cotton-belt of Texas, on the edge of thousands of acres of post-oak and black-jack (a species of oak) scrub, and my bees are working hard on the bloom, which affords a great deal of pollen but no honey, or very little.

To counteract the lack of honey in the bloom, there is a little caterpillar about 3/4 inch long, that feeds principally on the

The Midland Farmer

(SEMI-MONTHLY).

The representative modern Farm Paper of the Central and Southern Mississippi Valley. Page departments to every branch of Farming and Stock-Raising. Plain and Practical—Seasonable and Sensible. Send 25 cents, silver or two-cent stamps, and a list of your neighbors (for free samples), and we will enter your name for 1 year. (If you have not received your money's worth at end of year, we will, upon request, continue the paper to you free of cost another year).

W. M. BARNUM, Publisher,


Wainwright Building, ST. LOUIS, MO.
7D4f Please mention the Bee Journal.

EVERGREENS
100, 6 to 8 in. \$1; 12 to 18 in. \$2.50.
100, 2 ft. \$10 prepaid. 100, 4 to 6 ft.
varieties, \$15. 45 choice Fruit trees, 50
varieties, \$10. Ornamental & Fruit
Trees. Catalogue and prices of 50
great bargain lots SENT FREE.
Good Local Agents Wanted.

D. HILL, Specialist, Dundee, Ill.
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A BARGAIN An Excelsior Honey-
Extractor, 3 frames,
any size, almost new.
Price, \$7.00. Cost \$14.00. Address,

Theodore Bender, Canton, Ohio.
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UNION COMBINATION SAW—
for ripping,
cross-cutting,
mitering, rab-
beting, groov-
ing, gaining,
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beading, etc.
Full line FOOT
AND HAND-
POWER MA-
CHINERY. Send for Catalog A.

Seneca Falls Mfg. Co., 46 Water St., Seneca Falls, N.Y.
Please mention Bee Journal when writing.



Mr. Kipling Cured

By the inhalation of Oxygen, the specific cure for all lung troubles. For special information regarding THE OXYGEN TREATMENT, Address, **DR. PEIRO,** Central Music Hall, Chicago.

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THE A. I. ROOT CO'S GOODS

Wholesale. Retail. Including their discounts for goods wanted for use another season. It will pay you to send me list of goods wanted. Cash for Beeswax. **M. H. HUNT, BELL BRANCH, MICH.**

FREE FOR A MONTH

If you are interested in Sheep in any way you cannot afford to be without the best and only Weekly Sheep Paper published in the United States.

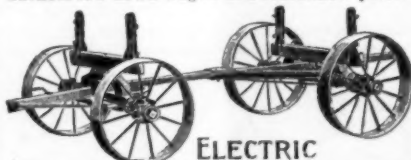
Wool Markets and Sheep

has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

WOOL MARKETS AND SHEEP, CHICAGO, ILL.

Farm Wagon Economy.

The economy of this proposition is not all found in the very reasonable price of the wagon itself, but in the great amount of labor it will save, and its great durability. The Electric Wheel Co., who make this Electric Handy Wagon and the now famous Electric Wheels, have solved the problem of a successful and durable low-down wagon at a reasonable price.



ELECTRIC

This wagon is composed of the best material throughout—white hickory axles, steel wheels, steel hounds, etc. Guaranteed to carry 4000 lbs.



These Electric Wheels are made to fit any wagon, and make practically a new wagon out of the old one. They can be had in any height desired and any width of tire up to 8 inches. With an extra set of these wheels a farmer can interchange them with his regular wheels and have a high or low-down wagon at will. Write for Catalog of the full "Electric Line" to Electric

Wheel Co., Box 16, Quincy, Ill.

leaves of the black-jack, and after it has run its appointed time, it webs itself up in one of the leaves. In eating, it starts generally on the edge, and wherever it cuts one of the laterals running from the midrib, there comes a drop of transparent liquid, about the size of a pin-head, which, if left for a day or two, gets as thick as good, ripe honey, is very sweet, and is more abundant after a good, heavy rain—say a week after. I have noticed this for the last two years. My bees suck this eagerly, and boil in and out of the hive in a way that makes me feel good, and tells me that swarming-time is near at hand.

Sometimes, during a damp spell, the cotton gets covered with vast numbers of aphids, and the upper side of the leaves will first get gummy, and then will even drip a kind of dirty-looking sweet fluid. If there is anything else on hand the bees here will not touch it. The same way with the cottonwood-tree, the leaves of which will get in the same condition. This will attract myriads of flies and wasps, but never a bee.

I have a queen that is four years old. I have had her two years. Last year she kept 16 Hoffman-frames full, but this year only 8. Now her daughter keeps 16 frames going. This is what I want to do: When mother and daughter swarm, cut out all but two of the best queen-cells from each hive, and then go to all the other hives, cut out every one of their queen-cells, and substitute two of these others, or my good ones.

Say mother and daughter are Nos. 1 and 2, respectively. No. 3 has swarmed about 10 days ago and is pretty short of bees, as I shook off a goodly number from the parent colony, and drove them in with the swarm on the old stand. Will it make much difference if I kill the young queen in No. 3 when either No. 1 or 2 swarm, and give them a cell or two with protectors?

W. H. ALDER.

Callaban Co., Tex., Apr. 27.

[The difference would depend altogether upon the length of time the substituted cell would be in getting a queen to lay after the other is removed. You can measure that pretty closely by the length of time between the swarming of No. 3 and No. 1. If they should swarm at the same time, there would be no loss of time by the change of cells. If No. 1 swarms 8 or 10 days after No. 3, then 8 or 10 days of laying will be lost.—C. C. MILLER.]

Texas.—The Central Texas Bee-Keepers' Association will meet at Milano, Tex., July 20 and 21, 1899. All are cordially invited to attend.

H. H. HYDE, Asst. Sec. and Treas.
Hutto, Texas.

Van Deusen Thin Foundation.

We have several 25-pound boxes of VanDeusen Thin Flat-Bottom Comb Foundation for sale at \$12.50 per box. This Foundation is preferred by many. We have only a few boxes of it at our Chicago Branch, so an order for same should be sent promptly. Address,

THE A. I. ROOT CO.,

118 Michigan Street, CHICAGO, ILL.

ADEL BEES

Are not Italians; they are GOLDEN CARNIOLANS—and practically a non-swarming, non-stinging strain of bees; great honey-gatherers and sure to winter. Tested Queens, each, \$1.00; 6 Queens, \$5.50; 12 Queens, \$9.00. Everything guaranteed. Book giving 37 years' experience in queen-rearing mailed free.

HENRY ALLEY,

21A3t WENHAM, ESSEX CO., MASS.

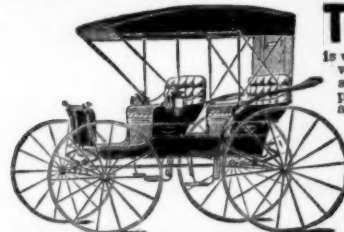
Italian Bees and Queens

... FOR SALE ...

Queens, \$1.00 each. Bees by the pound, \$1.00. Nuclei, two-frame, with Queen, \$2.00; one-frame, \$1.50; each additional frame, 50 cents. These are sent in light shipping-boxes, L. pattern frames.

MRS. A. A. SIMPSON,

19D4t SWARTS, Greene Co., PA.
Please mention Bee Journal when writing.



No. 514—Extension-Top Two-spring Carriage. Is complete with lamps, fenders, side curtains, storm apron and pole or shafts. Price, \$63. Guaranteed as good in every way as others sell for \$90.

THE BEST FOR THE MONEY

is what every man is naturally seeking. He should be doubly careful when it comes to the purchase of vehicles and harnesses. A man's life and that of his wife and family often depend upon quality in his buggy or carriage and harness. We give extraordinary quality for the money. Then there are the advantages of our plan of doing business.

WE HAVE NO AGENTS.

but sell all goods direct from our factory at wholesale prices.

We ship our goods anywhere for examination and guarantee everything. We make 170 styles of vehicles and 65 styles of harnesses. Don't buy any of these things until you get our large illustrated and descriptive catalogue. It's FREE.

Elkhart Carriage & Harness Mfg. Co. W. B. Pratt, Sec'y, Elkhart, Ind.



No. 100—Double Buggy Harness. Full nickel trimmed, price \$17; as good as retails for \$23.



20A13t

BEE-SUPPLIES!

We have the best equipt factory in the West. Capacity, one carload a day; and carry the largest stock and greatest variety of everything needed in the apiary, assuring BEST goods at the LOWEST prices, and prompt shipment. Illustrated Catalog, 72 pages, Free.

We also manufacture Tanks of either wood or galvanized steel, all sizes, any form, for all purposes. Price list free.

Address, **E. KRETCHMER, RED OAK, IOWA.**

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OUR MOTTO: WELL MANUFACTURED STOCK — QUICK SHIPMENTS.

Sections, Shipping-Cases and Bee-Keepers' Supplies

We make a specialty of making the very best Sections on the market.

The BASSWOOD in this part of Wisconsin is acknowledged by all to be the best for making the ONE-PIECE HONEY-SECTIONS—selected, young and thrifty timber is used.

Write for Illustrated Catalog and Price-List FREE.

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MARSHFIELD, WISCONSIN.

Carloads of Bee-Hives.....

Sections, Shipping-Cases, Comb Foundation



and EVERYTHING used in the bee-industry. We want the name and address of every bee-keeper in America. We supply dealers as well as consumers. We have Dry Kiln, Improved Machinery, 40,000 feet of floor space, and all modern appliances. We make prompt shipment. Write for Catalogs, Quotations, etc.

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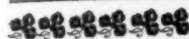
Page & Lyon Mfg. Co.

NEW LONDON, WIS.,

Operates two Sawmills that cut, annually, eight million feet of lumber, thus securing the best lumber at the lowest price for the manufacture of **Bee-Keepers' Supplies.**

They have also one of the **LARGEST FACTORIES** and the latest and most improved machinery for the manufacture of **Bee-Hives, Sections, &c.**, that there is in the State. The material is cut from patterns, by machinery, and is absolutely accurate. For Sections, the **clearest and whitest Basswood** is used, and they are polished on both sides. Nearness to Pine and Basswood forests, and possession of mills and factory equip with best machinery, all combine to enable this firm to furnish the **BEST GOODS AT THE LOWEST PRICES.**

Send for Circular and see the prices on a full line of Supplies.



PAT. 1879.
Bingham & Hetherington
Uncapping-Knife.

PRICES OF Bingham Perfect Bee-Smokers AND HONEY-KNIVES.

Smoke Engine (largest smoker made) 4-in. stove. Doz. \$13.00; each, by mail, \$15.50
Doctor. 3 1/2 in. stove. Doz. 9.00; " 1.10
Conqueror. 3-in. stove. Doz. 6.50; " 1.00
Large. 2 1/2 in. stove. Doz. 5.00; " .90
Plain. 2-in. stove. Doz. 4.75; " .70
Little Wonder (weight 10 ounces) . . . 2-in. stove. Doz. 4.50; " .60
Honey-Knife. Doz. 6.00; " .80

Bingham Smokers have all the new improvements. Before buying a Smoker or Knife, look up its record and pedigree.

FIFTEEN YEARS FOR A DOLLAR; ONE-HALF CENT FOR A MONTH.

Dear Sir:—Have used the Conqueror 15 years. I was always pleased with its workings, but thinking I would need a new one this summer, I write for a circular. I do not think the 4-inch Smoke Engine too large.

January 27, 1897.

Truly, W. H. EAGERTY, Cuba, Kansas.

T. F. BINGHAM, Farwell, Michigan.

The Oliver Typewriter.

IT TOOK 25 YEARS to find out that typewriters have been built up-side-down. The OLIVER is built right-side up, where the WORK IS IN SIGHT. THE OLIVER IS POPULAR because it is an up-to-date typewriter, not in the Trust, and because it SHOWS EVERY WORD AS YOU WRITE IT.



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JOURNAL, New York.
TRIBUNE, Chicago.
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YOUTH'S COMPANION, Boston.
ILLINOIS CENTRAL R.R., Chicago
and countless other houses of like importance and character.

Send for Catalog.... Oliver Typewriter Company, N. E. Cor. Washington and Dearborn Sts.
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Please mention Bee Journal when writing



Listen! Take my Advice AND BUY YOUR
Bee-Supplies of August Weiss!

FINE FOUNDATION AND TONS OF IT. WORKING Wax into Foundation for Cash or Trade a Specialty. I defy competition in Foundation. Millions of Sections—Polished on both Sides.

SATISFACTION GUARANTEED on a full line of Supplies. Send for a Catalog and be your own judge. Wax Wanted at 27 cents cash, or 28 cents in trade, delivered to me.

1D1f

AUGUST WEISS, Hortonville, Wis.

Please Mention the Bee Journal when writing Advertisers.

HONEY AND BEESWAX MARKET QUOTATIONS.

CHICAGO, May 8.—Not anything of consequence doing; a little honey is being sold at prices that have been prevailing for some time. White comb is scarce, but there is a surplus of dark. Extracted unchanged. Stocks light. Beeswax, 27c. R. A. BURNETT & Co.

DETROIT, April 10.—Fancy white, 12c; No. 1, 10 1/2c; dark and amber, 8 1/2c. Extracted in fair demand without change in price. Beeswax, 25 1/2c.

Decreasing demand and the attempt to crowd sales have forced down prices on comb honey. M. H. HUNT.

NEW YORK, May 9.—Fancy, 7 1/2c; choice, 6 1/2c; fair, 5 1/2c; common, 5 1/2c per gallon. Beeswax quiet at from 26 to 28 cents, according to quality.

Our market is in first-class condition, being bare of extracted honey, and demand good. New crop is beginning to arrive from the South. Comb honey is well cleaned up; some demand for white but demand for dark has ceased.

HILDRETH & SEGELEN.

SAN FRANCISCO, May 3.—White comb, 10 1/2c; amber, 7 1/2c. Extracted, white, 7 1/2c; light amber, 6 1/2c. Beeswax, 26 1/2c.

In quotable values there are no changes to record. A ship clearing this week for Siberia took 231 small cases of extracted, being honey repacked by jobbers. There will be a fair yield this season in the San Joaquin, probably 150 cars, mostly alfalfa honey, but the production will be very light in the balance of the State.

BOSTON, May 17.—Fancy white, 12 1/2c; A No. 1, 11 1/2c; No. 1, 10c; light amber, 9c; buckwheat, 8c. Extracted Florida, white, 7 1/2c; light amber, 6 1/2c. Beeswax, 27 1/2c.

The demand for both comb and extracted honey has settled down to the usual small proportions of summer, and prices quoted would be shaded some, too, as stocks are a little heavier than is liked at this season of the year.

BLAKE, SCOTT & LEE.

KANSAS CITY, May 15.—No. 1 white comb, 15c; fancy amber, 14c; No. 1 amber, 13 1/2c; fancy dark, 13c; No. 1 dark, 12c. White extracted, 6c; amber, 5 1/2c; dark, 4 1/2c. Beeswax, 25c. C. C. CLEMENS & Co.

CLEVELAND, March 9.—Fancy white, 13 1/2c; No. 1 white, 12 1/2c; A No. 1 amber, 10 1/2c; No. 2 amber, 9 1/2c; buckwheat, 8c. Extracted, white, 7c; amber, 6c; buckwheat, 5c. A. B. WILLIAMS & Co.

BUFFALO, May 5.—The season for honey is about closed. Some extra fancy white would sell at 11 1/2c; some very poor selling at 6 1/2c, and dull. No more business in honey before the opening of the ensuing season.

BATTERSON & Co.

OMAHA, May 18.—It is a hard matter just now to give quotations that would have any meaning at all. With the exception of small lots of buckwheat—very good for its kind, but it is not the kind wanted here, which dragged at 8 1/2c—there have been no new receipts, and there will not be a pound of honey carried over in dealers' hands. First receipts of new crop will certainly be picked up eagerly at fancy figures. PEYCKE BROS.

Nuclei of Bees For Sale.

We have arranged with a bee-keeper in Lee Co., Ill., about 100 miles west of Chicago, Ill., to fill orders for 3-frame (Langstroth) Nuclei of Italian Bees, with Queens, in light shipping-boxes, at \$2.75 each, or in lots of 5 Nuclei, with Queens, at \$2.50 each. Address,

GEORGE W. YORK & CO.

118 Michigan Street, CHICAGO, ILL.

BY RETURN MAIL GOLDEN BEAUTY ITALIAN QUEENS—reared from IMPORTED MOTHERS. Untested, 50 cents; Tested, \$1.00.

TERRAL BROS. Lampasas, Lamp. Co. Tex
18Atf Please mention the Bee Journal.

Order Early

There are indications that the demand for SUPPLIES will be very large this season, and everyone should order as early as possible. We have large facilities for manufacturing all kinds of

Bee-Keepers' Supplies,

And will serve our customers as quickly as possible.

Falcon Sections are the Finest Made.

1899 Catalog ready Feb. 1. Copy of the AMERICAN BEE-KEEPER (20 pages) free. Address

The W. T. Falconer Mfg. Co.
JAMESTOWN, N. Y.

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We make the New
Champion Chaff-Hive
with fence and plain sections, and a full line of other
SUPPLIES.

A postal sent us with your name for a Catalog will meet with the greatest surprise. **R. H. SCHMIDT & CO.,**
SHEBOYGAN, WIS.

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Young Men and Women

It will pay you to fit yourselves for good positions by taking Shorthand by Mail. Send \$1.60 for Text Book or 3 cents for catalog

Eclectic Shorthand College,

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Headquarters of the Eclectic System.

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BEE-BOOK

That covers the whole Apicultural Field more completely than any other published, send \$1.25 to Prof. A. J. Cook, Claremont, Calif., for his

Bee-Keepers' Guide.

Liberal Discounts to the Trade.

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I ARISE



To say to the readers of the BEE JOURNAL that
DOOLITTLE...
has concluded to sell
QUEENS in their season during 1899, at the following prices:

1 Untested Queen .. \$1.00
6 Untested Queens.. 4.50
12 Untested Queens 8.00
1 Tested Queen 1.50
3 Tested Queens.... 3.50
1 select tested queen 2.00
3 " " Queens 4.00
Select Tested Queen, previous season's rearing, \$3; Extra Selected, for breeding, the very

best, \$5.00. About a pound of Bees in a 2-frame Nucleus, with any Queen, \$2.00 extra.
Circular free, giving full particulars regarding each class of Queens. Address,

G. M. DOOLITTLE,

11A26t Borodino, Onondaga Co., N. Y.
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22nd
Year

Dadant's Foundation.

22nd
Year

Why does it sell so well?

Because it has always given better satisfaction than any other.
Because in 22 years there have not been any complaints, but thousands of compliments.



We guarantee satisfaction.

What more can anybody do? **BEAUTY, PURITY, FIRMNESS, No SAGGING, No LOSS.**
PATENT WEED PROCESS SHEETING.

Send name for our Catalog, Samples of Foundation and Veil Material. We sell the best Veils, cotton or silk.

The following dealers handle our Foundation exclusively:

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J. Nebel & Son High Hill, Mo.
G. W. Fassett..... Middlebury, Vt.
J. W. Bittenbender..... Knoxville, Iowa.
J. L. Gray St. Cloud, Minn.
Pierce Seed and Produce Co. Pueblo, Colo.
F. Foulger & Sons..... Ogden, Utah.
R. H. Schmidt & Co. Sheboygan, Wis.
Vickery Bros..... Evansville, Ind.
C. H. W. Weber..... Cincinnati, Ohio.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

Langstroth on the Honey-Bee, Revised. The Classic in Bee-Culture—
Price, \$1.25, by mail.

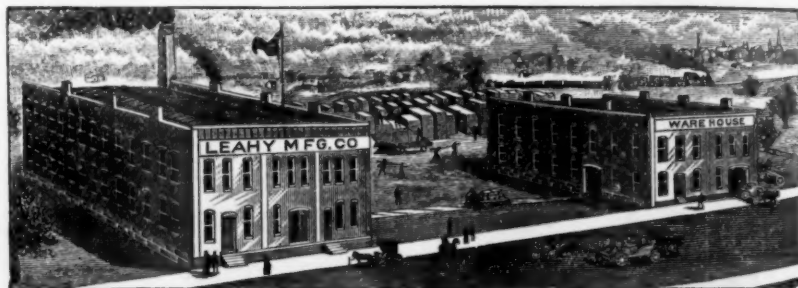
Beeswax Wanted

at all times.

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For Apiarian
Supplies, address

LEAHY MFG. CO.,

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Mr. Eastern Bee-Keeper,

Now is the time you want FOUNDATION AND SECTIONS in a rush. We usually fill orders within 24 hours of the time received. If you want your SUPPLIES shipped at once, send here.

SQUARE TIN CANS

For Extracted Honey, two 5-gallon cans in a case, 10 cases, \$5.00. Discount on a quantity.

Italian Queens and Bees in Season.

Our Catalog describes all, and we mail it free.

I. J. STRINGHAM, 105 Park Place, New York, N. Y.

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25 cents Cash paid for Beeswax.

This is a good time to send in your Beeswax. We are paying 25 cents a pound—**CASH**—upon its receipt. Now, if you want the money PROMPTLY, send us your Beeswax. Impure wax not taken at any price. Address as follows, very plainly,

GEORGE W. YORK & CO.,

118 Michigan Street, CHICAGO, ILL.